National Transportation Safety Board

Memorandum

Date: October 13, 2020

To: Director, Office of Marine Safety

From: E. Stolzenberg, Chief, Product Development Division [redacted]

Subject: Close-out memo regarding electrical breaker testing on fishing vessel *Mojo*

Accident no.	DCA19SM036
Accident type	Fire/Explosion
Vessel	*Mojo*
Location	Seward, Alaska 60°07.09' N, 149°26.22' W
Date	January 8, 2019
Time	2054 Alaska standard time (coordinated universal time – 9 hours)
Injuries	None
Damage	< $500,000
Environmental damage	None
Weather	Unknown
Waterway characteristics	Seward Boat Harbor is a protected harbor located on the northern edge of Resurrection Bay.

AUTHORITY:

The National Transportation Safety Board (NTSB) provided materials lab support to the US Coast Guard related to this accident.

ACCIDENT DESCRIPTION:

About 2054 local time on January 8, 2019, the commercial fishing vessel *Mojo* (56 feet / 49 gross tons) caught on fire while moored at its F Dock slip at Seward Boat Harbor in Seward, Alaska. There were no individuals on board or in the vicinity of the vessel, and there were no injuries. Police arrived at 2100 and secured the scene, and Seward and Bear Creek fire departments

extinguished the fire by approximately 2130. While fighting the fire, the deputy fire chief observed arcing and sparking at the concentrated flame area located aft of the wheelhouse. Upon disconnecting the shore power cable at the dockside power box, the arcing ceased. The fire investigation conducted on scene by Coast Guard investigation officers identified that the shore power connection was the origin point of the fire.

The vessel had been running on shore power since September 1, 2018, without incident. The breakers were properly rated, the selector switch was configured for shoreside power, and all ship service generators were shut down. One battery charger in the wheelhouse, an LED light in the engine room, and two battery chargers in the engine room were the only loads drawn from the shoreside power box.

On January 6, the vessel owner observed ice buildup and condensation forming on the windows and instrumentation in the wheelhouse. He returned the following day, on January 7 (the day before the fire), and installed a clamp-type Powerzone 110V 250W heat lamp in the wheelhouse to inhibit moisture precipitation.

About 10-15 years ago, the vessel owner modified the shoreside power box to split power distribution between a 50-amp breaker for his vessel *Specter* and a 30-amp breaker for the *Mojo* in the adjacent slip. The *Mojo's* operator and co-owner attested that he never observed the shoreside box's circuit breaker open at any time since he owned the vessel.

INVESTIGATION:

The Coast Guard requested NTSB materials lab assistance and sent the 30-amp breaker supplying the *Mojo* to the lab for testing (see associated accident docket for Materials Lab testing results). The NTSB has provided the examination results to the Coast Guard for their investigation.

CONCLUSION:

The requested work has been completed by the NTSB materials lab; therefore, I recommend that we close this investigation.

I concur,

[redacted]

Morgan Turrell,
Acting Director, Office of Marine Safety